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REMARKS

This amendment is submitted along with a request for continued examination (RCE). Favorable reconsideration of this application in light of the amendments and remarks herein is respectfully requested.

Claims 1-19 were pending in this Application. By this Amendment, claims 1, 3, 5, 8-9, 11 and 14-19 have been amended, and claims 2, 4, 6-7, 10, 12-13 have been canceled. Claims 21-24 have been added. Support for the claim amendments and additions can be found in the application as filed, including Figures 2, 5 and 7 and related text. No new matter has been added. Claims 1, 3, 5, 8-9, 11, 14-19, 21-24 are now pending in this Application. Claims 1, 3, 8, 9, 14 are independent claims.

The Examiner is thanked for his time in a brief telephone conference on August 11, 2006. Although no agreement was reached, the amendments herein are offered to address the Examiner's concerns and to move this matter toward allowance. To further that goal, a request is hereby made for a full telephonic interview BEFORE the next Office Action for purposes of identifying and resolving any additional issues that might remain even after this amendment.

Rejections under §102 and §103

In the Final Office Action, the claims were rejected under 35 U.S.C. § 1039a) as being unpatentable over Ebrahim, Higuchi and Shaikh. It is respectfully submitted that the rejections are no longer applicable due to the amendment of the claims herein. The pertinence of these references to the claims as amended herein is briefly discussed below.

The independent claims as amended recite that the first domain name service request from the client includes a domain name field having first contents being solely a host domain name that that can be resolved into a corresponding network address, and further that the data communications device determines whether the host domain name in the domain name field of the first domain name service request is included in a list of domain names associated with

corresponding content servers. The data communications device provides a second domain name service request to the domain name service server in response to interception of the first domain name service request, the second domain name service request having a modified domain name field if the host domain is included in the list of domain names. The modified domain name field includes a concatenated value including the host domain name as well as a client identifier identifying the client, such that the concatenated value does not represent a domain name that can be resolved to a network address.

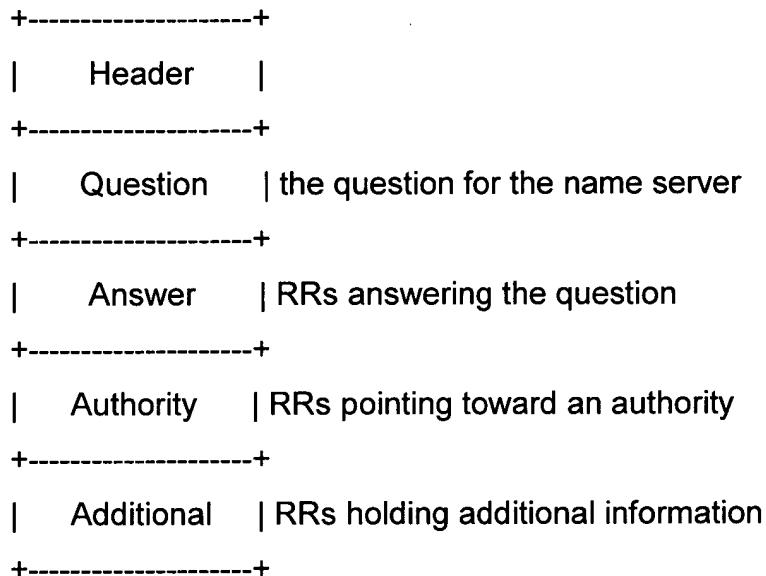
In another aspect recited in claim 15, the domain name service server parses a domain name field of the second domain name service request to determine whether the domain name field has a first contents or a second contents, the first contents being solely a host domain name that can be resolved into a corresponding network address, the second contents being solely a concatenated value including the host domain name and a client identifier identifying the client, such that the concatenated value does not represent a domain name that can be resolved into a corresponding network address. The server selects the content server identifier from a predetermined group of content server identifiers based on (i) the client identifier which identifies the client when the domain name field of the second domain name service request includes the second contents, and (ii) the data communications device identifier when the domain name field of the second domain name service request includes the first contents.

It is respectfully submitted that the above-recited features of the claims are not taught or suggested by the art of record including Ebrahim, Higuchi and Shaikh. Ebrahim shows only context-dependent name resolution at a server based on "caller context" and does not show any selective inclusion of a client identifier in a DNS request. Higuchi is concerned with achieving protocol conversion between IPv4 and IPv6 and really has no bearing on the present invention, notwithstanding several contrary assertions in previous Office Actions. Shaikh is seen to be concerned with DNS-based content distribution and

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specifically with the problem of client-proxy locality, and suggests specific techniques for addressing this problem that are different from those disclosed and claimed in the present application.

More specifically, Shaikh is seen to suggest adding a client IP address to DNS requests in one of two specific ways. One approach is to alter the format of the "Question" section, which as described in RFC 1035 is one of five separate sections that make up a DNS message. The following diagram is taken from RFC 1035 for reference:



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RFC 1035 also describes the contents of the Question section as follows:

```
+---+---+---+---+---+---+---+---+  
| |  
| / QNAME /  
| / | /  
+---+---+---+---+---+---+---+  
| | QTYPE |  
+---+---+---+---+---+---+---+  
| | QCLASS |  
+---+---+---+---+---+---+---+
```

where:

QNAME a domain name represented as a sequence of labels, where each label consists of a length octet followed by that number of octets. The domain name terminates with the zero length octet for the null label of the root. Note that this field may be an odd number of octets; no padding is used (EMPHASIS ADDED).

Shaikh does not elaborate on this first approach, and there is certainly no teaching or suggestion of making a non-standard use of the QNAME field of the Question section. It can be fairly inferred that Shaikh is suggesting that a new separate field might be added to the Question section, for example.

Shaikh also discusses a second, "more backward compatible" approach involving adding a new CA resource record which can be used in the Additional section of the request message (separate from the Question section).

Neither of the approaches in Shaikh is the same as the technique that is recited in the claims of this application, which makes selective use of the host

domain field of the request (i.e., QNAME field of Question section). It is noted that page 6 of the Office Action erroneously equates the host domain field with the entire Question section. It should be clear with respect to the amended claims that this cannot be the case, for the Question section has multiple fields and never includes solely a host domain name as recited in the claims.

More specifically, in the claimed technique, if the host domain name is found on the list of content servers at the data communications device, then the host domain field includes a concatenated value including both the host domain name as well as a client identifier. The concatenated value is not itself resolvable to a network address. An example concatenated value of "C-X.CLIENT\_ID.WWW.DOMAIN1.COM" is shown in Figure 2 of the application. The DNS server for the content distribution network is responsible for identifying the two separate pieces (host domain name and client identifier) and taking the desired action. Thus, this approach makes non-standard use of the host domain field in order to convey both the host domain name as well as a client identifier. It is therefore only used if the host domain name is on the list of content servers, such that the DNS request will be serviced by a DNS server that understands the non-standard format of the request. If the host domain name is not on the list of content servers, then the host domain field includes only the host domain name, in accordance with the standard DNS protocol, so that the request can be serviced by any standard DNS server.

It is respectfully urged that neither Shaikh nor the other art of record teach or suggest such functionality, and therefore the claims as amended are patentably distinct from all the references of record. Favorable action is respectfully requested.

Newly Added Claims

Claims 21-24 have been added and are believed to be in allowable condition. Support for these claims is provided within the Specification, for example, in Figure 2 and related text. No new matter has been added.

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Conclusion

In view of the foregoing remarks, this Application should be in condition for allowance. A Notice to this affect is respectfully requested. If there are any issues remaining, the Examiner is urged to telephone the undersigned Attorney.

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3661.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-2900, in Westborough, Massachusetts.

Respectfully submitted,

  
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